

Interdisciplinary Instrumentation Colloquium

Dark Matter and Nonproliferation: Advanced Detectors for International and Domestic Nuclear Security and their Relevance for Fundamental Physics

Speaker: Adam Bernstein
Lawrence Livermore National Laboratory

Date: Wednesday, October 18, 2006
Time: 4:00 PM sharp
Place: LBNL, Building 50 Auditorium
(directions at <http://InstrumentationColloquium.LBL.gov>)

There is surprising and considerable overlap between technologies deployed for international nuclear security and those used in basic science. Working in the areas of nonproliferation, homeland and international security, our Advanced Detectors Group designs and builds particle detectors once thought of as uniquely the province of astrophysics and particle physics. Examples include superconducting calorimeters that characterize nuclear materials, antineutrino detectors that monitor nuclear reactors, and - in a twist on an LBL favorite - portable light gas Time Projection Chambers that find neutron sources in the field. I will provide an overview of our work and discuss its intersection with fundamental science.

Presentations (pdf files) and dates of future colloquia are posted at
<http://InstrumentationColloquium.LBL.gov>

Suggestions for speakers and topics are welcome. Please contact
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